

CLAIMS

What is claimed is:

- 1 1. A system suitable for providing a backup of electronic data, comprising:
2 a network;
3 a server appliance coupled to the network, the server appliance including a data
4 storage device suitable for storage of electronic data; and
5 a plurality of client information handling systems coupled to the server appliance over
6 the network, each client information handling system including a data storage
7 device suitable for storage of the electronic data stored on the server
8 appliance, wherein portions of the electronic data stored on the server
9 appliance are transferred over the network and stored on the plurality of client
10 information handling systems, the portions of the electronic data stored on the
11 plurality of client information handling systems being suitable for restoring
12 substantially all of the electronic data stored on the server appliance.
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- 1 2. The system as described in claim 1, wherein parity data corresponding to the
2 electronic data stored on the server appliance is derived and stored on the plurality of
3 client information handling systems.
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- 1 3. The system as described in claim 2, wherein, if at least one of the plurality of client
2 information handling systems is unavailable and includes one of the portions of the
3 electronic data, the portions of the electronic data and the parity data stored on other
4 available ones of the plurality of client information handling systems are suitable for
5 restoring substantially all of the electronic data stored on the server appliance.
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- 1 4. The system as described in claim 2, wherein the parity data is suitable for correcting
2 errors in the restored electronic data stored on the server appliance.
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- 1 5. The system as described in claim 1, wherein at least one of the portions of the
2 electronic data is stored on at least two of the plurality of client information handling

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6. The system as described in claim 1, wherein the portions of the electronic data stored on the server appliance are transferred over the network to the plurality of client information handling systems based on at least one of: a RAID scheme and computed availability of storage space on the plurality of client information handling systems.

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7. A system suitable for providing a backup of electronic data, comprising:
a network;
a server appliance coupled to the network, the server appliance including a data storage device suitable for storage of electronic data; and
a plurality of client information handling systems coupled to the server appliance over the network, each client information handling system including a data storage device suitable for storage of the electronic data stored on the server appliance, wherein portions of the electronic data stored on the server appliance are transferred over the network and stored on the plurality of client information handling systems such that, if at least one of the plurality of client information handling systems is unavailable and includes one of the portions of the electronic data, the portions of the electronic data stored on other available ones of the plurality of client information handling systems are suitable for restoring substantially all of the electronic data stored on the server appliance.

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8. The system as described in claim 7, wherein parity data corresponding to the electronic data stored on the server appliance is derived and stored on the plurality of client information handling systems.

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9. The system as described in claim 8, wherein the portions of the electronic data and the parity data stored on the other available ones of the plurality of client information handling systems are suitable for restoring substantially all of the electronic data stored on the server appliance.

10. The system as described in claim 8, wherein the parity data is suitable for correcting errors in the restored electronic data stored on the server appliance.

11. The system as described in claim 7, wherein at least one of the portions of the electronic data is stored on at least two of the plurality of client information handling systems.

12. The system as described in claim 7, wherein the portions of the electronic data stored on the server appliance are transferred over the network to the plurality of client information handling systems based on at least one of: a RAID scheme and computed availability of storage space on the plurality of client information handling systems.

13. A method of providing a backup of electronic data on a server appliance utilizing a plurality of client information handling systems communicatively coupled to the server appliance over a network, comprising the steps of:

receiving a request for the backup of the electronic data stored on the server appliance;

configuring the electronic data stored on the server appliance for transfer to the plurality of client information handling systems over the network;

transferring portions of the electronic data from the server appliance to the plurality of client information handling systems over the network; and

storing the portions of the electronic data on the plurality of client information handling systems, the portions of the electronic data stored on the plurality of client information handling systems being suitable for restoring substantially all of the electronic data stored on the server appliance.

- 1 14. The method as described in claim 13, further comprising the step of:
2 after failure of the server appliance, restoring substantially all of the electronic data
3 stored on the server appliance to another server appliance solely based on the
4 portions of the electronic data stored on the plurality of client information
5 handling systems.
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1 15. The method as described in claim 13, further comprising the steps of:
2 deriving parity data corresponding to the electronic data stored on the server
3 appliance; and
4 storing the parity data on the plurality of client information handling systems.
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1 16. The method as described in claim 15, further comprising the step of:
2 after failure of the server appliance, if at least one of the plurality of client
3 information handling systems is unavailable and includes one of the portions
4 of the electronic data, restoring substantially all of the electronic data stored
5 on the server appliance to another server appliance solely based on the
6 portions of the electronic data and the parity data stored on other available
7 ones of the plurality of client information handling systems.
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1 17. The method as described in claim 15, further comprising the steps of:
2 after failure of the server appliance, restoring substantially all of the electronic data
3 stored on the server appliance to another server appliance solely based on the
4 portions of the electronic data stored on the plurality of client information
5 handling systems; and
6 correcting errors in the restored electronic data stored on the server appliance based
7 on the parity data.
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1 18. The method as described in claim 13, wherein at least one of the portions of the
2 electronic data is stored on at least two of the plurality of client information handling
3 systems, and further comprising the step of:

after failure of the server appliance, if at least one of the plurality of client information handling systems is unavailable and includes one of the portions of the electronic data, restoring substantially all of the electronic data stored on the server appliance to another server appliance solely based on the portions of the electronic data stored on other available ones of the plurality of client information handling systems.

19. The method as described in claim 13, wherein the configuring step further comprises the step of:
dividing the electronic data stored on the server appliance into the portions of the electronic data based on at least one of: a RAID scheme and computed availability of storage space on the plurality of client information handling systems.

20. A method of providing a backup of electronic data on a server appliance utilizing a plurality of client information handling systems communicatively coupled to the server appliance over a network, comprising the steps of:
receiving a request for the backup of the electronic data stored on the server appliance;
configuring the electronic data stored on the server appliance for transfer to the plurality of client information handling systems over the network;
transferring portions of the electronic data from the server appliance to the plurality of client information handling systems over the network; and
storing the portions of the electronic data on the plurality of client information handling systems such that, if at least one of the plurality of client information handling systems is unavailable and includes one of the portions of the electronic data, the portions of the electronic data stored on other available ones of the plurality of client information handling systems are suitable for restoring substantially all of the electronic data stored on the server appliance.

21. The method as described in claim 20, further comprising the step of:

after failure of the server appliance, restoring substantially all of the electronic data stored on the server appliance to another server appliance solely based on the portions of the electronic data stored on the plurality of client information handling systems.

22. The method as described in claim 20, further comprising the steps of:
deriving parity data corresponding to the electronic data stored on the server appliance; and
storing the parity data on the plurality of client information handling systems.

23. The method as described in claim 22, further comprising the step of:
after failure of the server appliance, restoring substantially all of the electronic data stored on the server appliance to another server appliance solely based on the portions of the electronic data and the parity data stored on the other available ones of the plurality of client information handling systems.

24. The method as described in claim 20, wherein at least one of the portions of the electronic data is stored on at least two of the plurality of client information handling systems, and further comprising the step of:
after failure of the server appliance, restoring substantially all of the electronic data stored on the server appliance to another server appliance solely based on the portions of the electronic data stored on the other available ones of the plurality of client information handling systems.

25. The method as described in claim 20, wherein the configuring step further comprises the step of:
dividing the electronic data stored on the server appliance into the portions of the electronic data based on at least one of: a RAID scheme and computed availability of storage space on the plurality of client information handling systems.